IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-30 (canceled)

31. (currently amended) A method of separating a mixture of analytes, comprising

(1) applying the mixture of analytes to a chromatography sorbent comprising polymer beads of aromatic vinyl monomers substituted with hydrocarbyl or halocarbyl substituents, or combinations thereof, comprising from 1 to 1,000,000 carbon atoms, wherein said aromatic vinyl monomers or said hydrocarbyl substituents or both have been functionalized by halogenation, provided that when the vinyl aromatic monomers are brominated, bromination is performed utilizing electrophilic aromatic substitution; and

(2) removing polar analytes from the chromatography sorbent by a hydrophilic solvent wash.

32. (previously presented) The method of claim 31, wherein the halocarbyl substituent is a fluorocarbyl substituent comprising from 1 to 100 carbons.

33. (original) The method of claim 31, wherein said aromatic vinyl monomers are functionalized by bromination.

34. (original) The method of claim 31, further comprising:

(3) eluting nonpolar analytes from the chromatography sorbent with a hydrophobic solvent wash.

35. (original) The method of claim 31, further comprising:

(4) performing a cleavage step on the chromatography sorbent; and

(5) eluting additional analytes from the chromatography sorbent.

36. (original) The method of claim 35, wherein the cleavage step is performed by treating the chromatography sorbent with acid, base, enzymes, chemical cleavage agents, or light.

37. (previously presented) The method of claim 31, wherein at least one of the analytes comprises a hydrophobic moiety selected from a protecting group, a fluorescent label, a dye, a quenching agent, a lipid, a hapten, a fluorinated moiety, a vitamin, a hydrophobic peptide, a hydrophobic drug, or mixtures thereof.

38. (original) The method of claim 37, wherein the hydrophobic moiety is cleavable from the analyte.

39. (currently amended) A chromatographic method for separating labeled nucleic acids from unlabeled nucleic acids comprising:

(1) contacting a solution comprising labeled and unlabeled nucleic acids with a chromatography sorbent comprising a halogenated polymer of aromatic vinyl monomers comprising styrene and divinylbenzene substituted with hydrocarbyl or halocarbyl substituents, or combinations thereof, comprising from 1 to 1,000,000 carbon atoms, wherein said vinyl aromatic monomers or said hydrocarbyl substituents or both have been functionalized by halogenation, provided that when the vinyl aromatic monomers are brominated, bromination is performed utilizing electrophilic aromatic substitution; and

(2) eluting unlabeled nucleic acids from the chromatography sorbent with a solvent wash.

40. (previously presented) The chromatographic separation method of claim 39, wherein said vinyl aromatic monomers are brominated.

41. (previously presented) The chromatographic separation method of claim 39, wherein said

halocarbyl substituent is fluorocarbyl.

42. (previously presented) The chromatographic separation method of claim 39, further comprising:

(3) eluting labeled nucleic acids from the chromatography sorbent with a hydrophobic solvent wash.

43. (previously presented) The chromatographic separation method of claim 39, further comprising:

(3) treating the chromatography sorbent with a cleavage agent; and

(4) eluting additional nucleic acids from the chromatography sorbent.

44. (previously presented) The chromatographic separation method of claim 43, wherein the cleavage agent is selected from the group consisting of acid, base, enzymes, chemical cleavage agents and light.

45. (currently amended) The chromatographic separation method of claim 39, wherein the labeled nucleic acids comprise a hydrophobic moiety selected from a protecting group, a fluorescent label, a ~~an amine linked~~ dye, a quenching agent, a lipid, a hapten, a fluorinated moiety, a vitamin ~~biotin~~, a hydrophobic peptide, a hydrophobic drug, or mixtures thereof.

46. (previously presented) The chromatographic separation method of claim 45, wherein the protecting group is stable to oligonucleotide synthesis conditions and unstable in the presence of acid.

47. (previously presented) The method of claim 31, wherein halogen substituents are present on the aromatic vinyl monomers, but not present on the linkers between the aromatic monomers.

48. (previously presented) The method of claim 32, wherein the fluorocarbyl substituent comprises from 1 to 20 carbon atoms.

49. (previously presented) The method of claim 32, wherein the fluorocarbyl substituent is perfluorocarbyl.

50. (previously presented) The method of claim 49, wherein the perfluorocarbyl substituent is selected from heptadecafluorooctyl or pentafluorobenzyl.

51. (previously presented) The method of claim 33, wherein the brominated vinyl aromatic monomers are further substituted with hydrocarbyl substituents comprising from 1 to 100 carbon atoms.

52. (previously presented) The method of claim 51, wherein the hydrocarbyl substituents comprise from 1 to 20 carbon atoms.

53. (previously presented) The method of claim 51, wherein the aromatic monomers are brominated after substitution with hydrocarbyl substituents.

54. (previously presented) The method of claim 31, wherein the mixture of analytes comprises nucleic acids, peptides, carbohydrates, lipids, synthetic compounds, compounds from a combinatorial library, or combinations thereof.

55. (previously presented) The method of claim 54, wherein the mixture of analytes comprises nucleic acids having a modified phosphate backbone, tritylated oligonucleotides, oligonucleotides labeled with dyes, biotinylated oligonucleotides, or cholesterylated oligonucleotides, or combinations thereof.

56. (previously presented) The method of claim 37, wherein the protecting group is a hydroxyl protecting group stable to oligonucleotide synthesis conditions.

57. (previously presented) The method of claim 37, wherein the protecting group is selected from an ether, substituted methyl ether, substituted ethyl ether, silyl ether, ester, carbonate, trityl, pixyl, or moxyl.

58. (previously presented) The method of claim 31, wherein the chromatography sorbent is utilized in a chromatographic separation method selected from ion pair reverse phase chromatography, high performance liquid chromatography, cartridge purification, gel chromatography, thin layer chromatography or microfluidics applications incorporating a chromatographic component.

59. (previously presented) A method of separating a mixture of analytes, comprising

(1) applying the mixture of analytes to a chromatography sorbent comprising a brominated polymer comprising aromatic monomers substituted with hydrocarbyl or halocarbyl substituents, or combinations thereof, comprising from 1 to 1,000,000 carbon atoms; wherein the bromine substitutions are present on the aromatic monomers of the polymer, and

(2) removing polar analytes from the chromatography sorbent by a hydrophilic solvent wash.

60. (previously presented) The method of claim 59, wherein the brominated polymer is brominated poly(styrene divinylbenzene).

61. (previously presented) The method of claim 59, wherein the hydrocarbyl or halocarbyl substituent comprises from 1 to 100 carbon atoms.

62. (previously presented) The method of claim 59, wherein the halocarbyl substituent is

fluorocarbyl.

63. (previously presented) The method of claim 62, wherein the fluorocarbyl substituent is perfluorocarbyl.

64. (previously presented) The method of claim 59, further comprising:

(3) eluting nonpolar analytes from the chromatography sorbent with a hydrophobic solvent wash.

65. (previously presented) The method of claim 59, further comprising:

(4) performing a cleavage step on the chromatography sorbent; and

(5) eluting additional analytes from the chromatography sorbent.

66. (previously presented) The method of claim 65, wherein the cleavage step is performed by treating the chromatography sorbent with acid, base, enzymes, chemical cleavage agents, or light.

67. (previously presented) The method of claim 59, wherein at least one of the analytes comprises a hydrophobic moiety selected from a protecting group, a fluorescent label, a dye, a quenching agent, a lipid, a hapten, a fluorinated moiety, a vitamin, a hydrophobic peptide, a hydrophobic drug, or mixtures thereof.

68. (previously presented) The method of claim 59, wherein the mixture of analytes comprises nucleic acids, peptides, carbohydrates, lipids, synthetic compounds, compounds from a combinatorial library, or combinations thereof.

69. (previously presented) The method of claim 68, wherein the mixture of analytes comprises nucleic acids having a modified phosphate backbone, tritylated oligonucleotides, oligonucleotides labeled with dyes, biotinylated oligonucleotides, or cholesterylated

oligonucleotides, or combinations thereof.

70. (previously presented) The method of claim 67, wherein the protecting group is a hydroxyl protecting group stable to oligonucleotide synthesis conditions.

71. (previously presented) The method of claim 67, wherein the protecting group is selected from an ether, substituted methyl ether, substituted ethyl ether, silyl ether, ester, carbonate, trityl, pixyl, or moxyl.

72. (previously presented) A method of separating a mixture of analytes, comprising

(1) applying the mixture of analytes to a chromatography sorbent comprising a polymer comprising aromatic vinyl monomers substituted with halocarbyl substituents comprising from 1 to 1,000,000 carbon atoms; and

(2) removing polar analytes from the chromatography sorbent by a hydrophilic solvent wash.

73. (previously presented) The method of claim 72, wherein the hydrocarbyl or halocarbyl substituent comprises from 1 to 100 carbon atoms.

74. (previously presented) The method of claim 72, wherein the halocarbyl substituent is fluorocarbyl.

75. (previously presented) The method of claim 74, wherein the fluorocarbyl substituent is perfluorocarbyl.

76. (previously presented) The method of claim 75, wherein the perfluorocarbyl substituent is selected from heptadecafluorooctyl or pentafluorobenzyl.

77. (previously presented) The method of claim 72, further comprising:

(3) eluting nonpolar analytes from the chromatography sorbent with a hydrophobic solvent wash.

78. (previously presented) The method of claim 72, further comprising:

(4) performing a cleavage step on the chromatography sorbent; and

(5) eluting additional analytes from the chromatography sorbent.

79. (previously presented) The method of claim 78, wherein the cleavage step is performed by treating the chromatography sorbent with acid, base, enzymes, chemical cleavage agents, or light.

80. (previously presented) The method of claim 72, wherein at least one of the analytes comprises a hydrophobic moiety selected from a protecting group, a fluorescent label, a dye, a quenching agent, a lipid, a hapten, a fluorinated moiety, a vitamin, a hydrophobic peptide, a hydrophobic drug, or mixtures thereof.

81. (previously presented) The method of claim 72, wherein the mixture of analytes comprises nucleic acids, peptides, carbohydrates, lipids, synthetic compounds, compounds from a combinatorial library, or combinations thereof.

82. (previously presented) The method of claim 81, wherein the mixture of analytes comprises nucleic acids having a modified phosphate backbone, tritylated oligonucleotides, oligonucleotides labeled with dyes, biotinylated oligonucleotides, or cholesterylated oligonucleotides, or combinations thereof.

83. (previously presented) The method of claim 80, wherein the protecting group is a hydroxyl protecting group stable to oligonucleotide synthesis conditions.

84. (previously presented) The method of claim 80, wherein the protecting group is selected from an ether, substituted methyl ether, substituted ethyl ether, silyl ether, ester, carbonate, trityl, pixyl, or moxyl.